STANDARD IB CLUTCH

IB318P0

QUALITY IS STANDARD

- TAPERED ROLLER MAIN BEARINGS
- SEALED FOR LIFE PILOT BEARING
- VENTILATED CENTER PLATES AND DRIVE RING
- OPTIONAL SINTERED IRON PLATES
- MORE SUITABLE FOR SIDE LOAD APPLICATIONS
- LESS MAINTENANCE
- IMPROVED HEAT DISIPATION
- CREATES 25% HIGHER TORQUE CAPACITY
- EASES ADJUSTMENT VERIFICATION

SPECIFICATIONS – IB318P0

Model Number	SAE HSG.	Dimension "A" mm (in)	Max. Input Torque Nm (lb-ft)		Maximum Safe Speed				Weight kg (lbs)
					Solid Plates		Split Plates		
			Organic	Sintered	Cast Drive Ring	Nodular Drive Ring	Cast Drive Ring	Nodular Drive Ring	
IB318P0	0	120 (4.7244)	8141 (6000)	10176 (7500)	N/A	2200	N/A	N/A	417 (920)
		100 (3.937)							
		80 (3.1496)							

LOAD CLASSIFICATIONS BASED UPON AGMA LOAD CHARACTERISTICS

PRIME MOVER	DURATION OF SERVICE	DRIVEN MACHINE LOAD CLASSIFICATIONS		
		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
Electric motor	Up to 3 hours per day	1.00	1.25	1.50
	3-10 hours per day	1.00	1.25	1.75
	Over 10 hours per day	1.25	1.50	2.00
Multi-cylinder internal combustion engine	Up to 3 hours per day	1.00	1.25	1.75
	3-10 hours per day	1.25	1.50	2.00
	Over 10 hours per day	1.50	1.75	2.25
Multi-cylinder internal combustion engine with high torque rise	Up to 3 hours per day	1.50	1.75	2.25
	3-10 hours per day	1.75	2.00	2.50
	Over 10 hours per day	2.00	2.25	2.75
Single cylinder internal combustion engine	Up to 3 hours per day	1.25	1.50	2.00
	3-10 hours per day	1.50	1.75	2.25
	Over 10 hours per day	1.75	2.00	2.50

All clutch engagements to be with prime mover below 1000 RPM. High inertia loads may require use of larger clutch. Contact Twin Disc application engineering department for assistance.

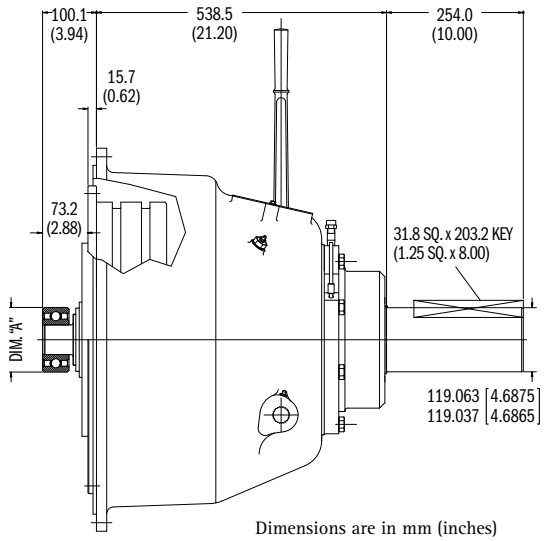
TO CALCULATE APPLICATION TORQUE:

$$\frac{5252 \times HP}{\text{Engine RPM}} = \text{Torque}$$

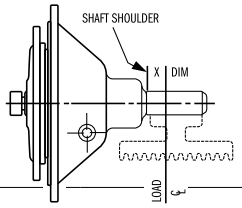
Torque x Load Factor = Application Torque

Use load factor from chart at left

IB318P



Dimensions are in mm (inches)



IB318P0 – ALLOWABLE SIDE LOAD, KG (LBS)

PTO MODEL	PTO	X DISTANCE, mm (in) see sketch —								
		25.4 (1.0)	50.8 (2.0)	76.2 (3.0)	101.6 (4.0)	127.0 (5.0)	152.4 (6.0)	177.8 (7.0)	203.2 (8.0)	228.6 (9.0)
IB318P0	1000	7396 (16306)	7411 (15683)	5999 (13225)	5123 (11295)	4471 (9856)	3965 (8742)	3563 (7855)	3235 (7131)	2962 (6529)
	1200	7004 (15442)	6737 (16852)							
	1800	6203 (13625)	5966 (13153)	5746 (12669)						
	2000	6011 (13253)	5782 (12747)	5569 (12278)						
	2200	5838 (12871)	5615 (12380)	5410 (11928)						
IB318P0	1000	7400 (16316)	6114 (13479)	5068 (11175)	4330 (9546)	3777 (8328)	3350 (7387)	3010 (6637)	2732 (6025)	2502 (5517)
	1200	7008 (15452)								
	1800	6206 (13683)	5970 (13162)							
	2000	6015 (13261)	5786 (12756)							
	2200	5842 (12880)	5620 (12389)							
IB318P0	1000	5459 (12036)	4334 (9555)	3593 (7921)	3068 (6765)	2678 (5903)	2375 (5236)	2136 (4704)	1937 (4271)	1774 (3910)
	1200									
	1800									
	2000									
	2200									

The following general formula should be used for determining the actual applied load: $L = \frac{126{,}000 \times HP}{N \times D} \times F \times LF$

WHERE L = Actual Applied Load (lbs)
N = Shaft Speed (RPM)
D = Pitch Diameter (in) of Sheave, etc.
F = Load Factor
1.0 for Chain or Gear Drive, 1.5 for Timing Belts, 2.5 for All V Belts, 3.5 for Flat Belts
LF = 2.1 for Reciprocating Compressors and other Severe Shock Drives and 1.8 for Large Inertia Type Drives (i.e. crushers, chippers, planers, etc.)

Compound Drives and Power Engaged Power Take-Off applications must have written factory review.

For nearly a century, we've been putting horsepower to work by designing, engineering and manufacturing rugged-duty industrial products. Our products and our reputation are bolted to the most renowned engine manufacturers and equipment OEMs in the world. Our mission is to make your machines and vehicles more productive, more durable, more operator-friendly, more cost-effective. From design and installation consultation through after-sale support, Twin Disc and its distributors are committed to your business. No one knows more about managing horsepower in more ways than Twin Disc.

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